

CLAIMS

What is claimed is:

- 1 1. A method for making an integrated circuit the method
2 comprising:
3 a. forming a semiconductor film onto a first substrate;
4 b. forming a metal film onto a second substrate;
5 c. bonding said second substrate with said metal film
6 onto said semiconductor film of said first substrate;
7 d. forming a first layer of transistors onto said
8 semiconductor film;
9 e. removing said second substrate at a temperature
10 within a low temperature range; and
11 f. bonding said semiconductor film with said first
12 layer of transistors to a second layer of transistors of a third
13 substrate.
- 1 2. The method of claim 1 wherein said semiconductor film is
2 formed by way of ion implantation.
- 1 3. The method of claim 1 wherein said metal film includes a
2 noble metal.
- 1 4. The method of claim 1 further including, after removing
2 said second substrate, bonding a carrier wafer onto said first
3 layer of transistors.

1 5. The method of claim 4 wherein said bonding of said
2 semiconductor film with said layer of transistors includes placing
3 said carrier wafer with said first layer of transistors onto said
4 transistor layer of said third substrate.

1 6. The method of claim 5 wherein said bonding of said
2 semiconductor film further includes aligning said first layer of
3 transistors with said second layer of transistors.

1 7. The method of claim 1 wherein said removing said second
2 substrate at a temperature within a low temperature range is
3 performed by way of hydrogen annealing.

1 8. The method of claim 2 further including, after bonding
2 said second substrate, removing said first substrate.

1 9. The method of claim 8 wherein said first substrate is
2 removed by heating an assembly that includes said first substrate
3 with said semiconductor film and said second substrate with said
4 metal film.

1 10. The method of claim 1 wherein, before said bonding of
2 said semiconductor film with said first layer of transistors to a
3 second layer of transistors, a carrier wafer is bonded to said
4 semiconductor film.

1 11. The method of claim 1 wherein after forming a
2 semiconductor film onto a first substrate a first oxide film is
3 formed on said semiconductor film.

1 12. The method of claim 1 wherein said metal film is formed
2 onto second oxide film deposited onto said second semiconductor.

1 13. The method of claim 1 wherein said first layer of
2 transistors is replaced by a patterned layer.

Add A2

Add B3

Add C6

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Add G3

Add H1

Add J3

Add D2

Add F1